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1.(amended) A method for ~~detecting~~ identifying a single nucleotide polymorphism in a target in an isothermal nucleic acid amplification reaction, said method comprising ~~in an isothermal nucleic acid amplification reaction~~:

a) hybridizing a detector primer to the target, wherein the detector primer comprises a diagnostic nucleotide for the single nucleotide polymorphism located about one to four nucleotides ~~from~~ 5' of a 3′ terminal nucleotide of the detector primer which is complementary to the target sequence;

b) amplifying the target by hybridization and extension of the detector primer;

c) determining ~~an~~ whether the efficiency of said detector primer extension is greater, lesser or equal to the efficiency of extension of a detector primer without said diagnostic nucleotide; and~~;~~

d) detecting the presence or absence of the single nucleotide polymorphism based on the efficiency of detector primer extension.

3.(amended) The method of Claim ~~2~~ 1 wherein the single nucleotide polymorphism is identified using two or more detector primers, each comprising a different diagnostic nucleotide.

4.(amended) The method of Claim 3 wherein two detector primers are used to identify which of two possible ~~alleles~~ single nucleotide polymorphisms is present in the target sequence.

5.(amended) The method of Claim 3 wherein four detector primers are used to identify the ~~nucleotide present in the target sequence at the position of the~~ single nucleotide polymorphism.

13.(amended) The method of Claim 1 wherein the isothermal amplification reaction is selected from the group consisting Strand Displacement Amplification (SDA), Self-Sustaining Sequence Replication (3SR), Nucleic Acid Sequence Based Amplification (NASBA) and Transcription Mediated Amplification (TMA).

17.(amended) The method of Claim 1 wherein the presence or absence of the single nucleotide polymorphism is detected by means of a label ~~associated with~~ attached to the detector primer.

19.(amended) The method of Claim 18 wherein the label is a fluorescent donor/quencher dye pair and a decrease in donor dye fluorescence is detected as ~~an indication of~~ identifying the presence of the single nucleotide polymorphism.

20.(amended) The method of Claim 19 wherein a change in fluorescence polarization is detected as ~~an indication~~identifying of the presence of the single nucleotide polymorphism.

22.(amended) The method of Claim 1 further comprising, prior to amplifying, displacing the hybridized detector primer from the target by extension of an upstream primer~~.~~, and hybridizing the detection primer to the target.

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